

Claims

While the present invention has been described above in terms of specific embodiments, it is to be understood that the invention is not limited to the disclosed embodiments. On the contrary, the present invention is intended for various modifications and equivalent structures included within the spirit and scope of the appended claims.

I, the inventor claim:

1. A computer network method for paying for goods or services over the network using telecommunication accounts through at least one telecommunication service provider and a wireless communication device such as a mobile phone comprising:
 - providing at least a centralized payment processor linked to the network;
 - extending at least one the telecommunication service provider's main processor for establishing sub accounts for both payer and payee on the provider's main processor having a corresponding account identifier to the main telecommunication account such as their mobile or fixed line phone numbers where such sub accounts include personal identification such as a password or a voice pattern of the payer and payee in order to gain access;

conducting a payment process initiated by the payer through the payee's point of sale by validating the payer's required mobile phone number or account identifier and the payee's account identifier;

- 5 in the payment processor, upon receiving the account identifier of both payer and payee, responding with confirming the accounts with the respective telecommunication service provider's main processor over the network;

- in the payment processor, upon receiving a positive response from the said
- 10 telecommunication service provider of the payer and payee, responding with an activation code sent over the network to the payer and initiating a connection to the payer's mobile phone to request the activation code to be inputted either through the keypad or by speaking the code directly to the microphone piece of the mobile phone so as to be validated, said response includes an indication of
- 15 approval if the validating step results in identifying and confirming the transaction by assigning an unique transaction number;

in the payment processor, if the validating step results in confirmation of the transaction,

- 20 the step of requesting for a password is initiated where the payer is prompted to key in the password using the keypad or saying the password to the microphone so as to authenticate the payer's identity, authorisation and associating the

accounts linkage for both payer and payee to the payment transaction;

in the payment processor, upon receiving the password or voice pattern from the payer, this is authenticated with the stored password or voice pattern at the

5 payer's telecommunication service provider in order to gain access to the payer's sub account over the network;

in the payer telecommunication service provider's processor, upon authentication of the password or voice pattern will response as authenticated to

10 the payment processor over the network;

if both confirmation and authenticating steps are validated, where the payer's account is a prepaid account, the step includes a further step of verifying the availability of funds to affect the purchase and on confirmation from the payer's

15 telecommunication provider, the telecommunication service provider will debit an amount of money equal to the payer's payment amount, subject to adjustment as instructed by payment processor over the network;

if both confirmation and authenticating steps are validated, the payer's

20 telecommunication service provider will record a debit entry with an amount of money equal to the payer 's payment amount in the monthly telecommunication bill, subject to adjustment where the payer's account is an non-prepaid

telecommunication account as instructed by the payment processor over the network;

if both confirmation, authenticating and debiting of the payer's account steps are
5 validated, the payment processor will sent an approval code to the payee or
merchant server and instruct the merchant's telecommunication service provider
where the merchant's sub account is held to record a credit entry with an
amount of money equal to the payer's payment amount on the merchant's
monthly telecommunication bill over the network, subject to adjustment where
10 such credit can be cashed out only when there is a net positive cash from the
total bill on settlement;

at the payee or merchant's server, upon receiving this approval code, requested
goods or services will be deemed sold to the payer and will be released

15 according to the terms of sale over the network;

at the completion of payment process, both payer and payee or merchant will
receive an encrypted receipt detailing the purchase where the end-user will
receive such receipt as a text message into the mobile phone's memory storage
20 and the merchant's server upon receiving this receipt message over the network
will stored this into its database;

verification of purchase includes the step of downloading the text message from the payer's mobile phone to the merchant's server using a wireless coupling device and the encrypted message is matched against the copy retrieved from the merchant's database;

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and providing the integrity of the receipt includes the step of uploading the encrypted receipt text message from the payer's mobile phone using the reply function to the payment processor server over the network for decryption upon which the details of the transaction will be forwarded to the merchant

10 originating the transaction and a copy of the decrypted text message back to the end-user where such copy may be printed out by way of a wireless printer connected to the mobile phone.

2. A method according to claim 1 wherein the payment is in the form of
15 monetary units.

3. A method according to claim 1 wherein the payment from the payer is made as a direct debit transaction in the case of a prepaid telecommunication account.

20 4. A method according to claim 1 wherein the payment is made from the payer as a debit book entry transaction in the case of an non prepaid telecommunication account where the payment amount is included in the billing statement where the total bill includes regular telecommunication charges.

5. A method according to claim 1 wherein the payment is made to the merchant or payee as a credit book entry in the case of non prepaid telecommunication account and is including in the billing statement where the total may be netted off with regular telecommunication charges.

6. A method according to claim 1 wherein the purchase transaction is initiated at a point of sale by payer by connecting using internet protocol or wireless application protocol.

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7. A method according to claim 1 wherein the point-of-sale is connected to the network.

8. A method according to claim 1 wherein the payer and payee sub account are linked to their respective telephone or wireless telephone service account at their telecommunication service provider.

9. A method according to claim 1 wherein the payer's account and payee or merchant's account is a prepaid telephone or wireless telephone service account linked to their sub account.

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10. A method according to claim 1 wherein said communicating data indicative of the payment transaction and mobile telephone account from the point-of-sale

to the payment processor includes communicating the data from the point-of-sale over a network to the payment processor.

11. A method according to claim 10 wherein the communicating step includes
5 responding with an activation code being sent to the point of sale over a network from the payment processor.

12. A method according to claim 10 wherein said communicating step includes
10 requesting the previously sent activation code to be responded by payer either by voice or by keying into the mobile keypad upon successful connecting to the user's mobile communication device to the payment processor being sent over a network.

13. A method according to claim 10 wherein said communicating step further
15 comprising communicating a request for authentication data to be responded by payer either by voice or by keying into the mobile keypad at the payer's mobile device sent over a network to the payment processor over the network.

14. A method according to claim 13 where authentication data is a password or
20 voice pattern of the user stored in the sub account linked to the telecommunication account with the payer's carrier required to authorise the transaction.

15. A method according to claim 10 where upon receiving the successful
authorisation from the payer's carrier, payment processor will credit the payee's
telecommunication sub account and debit the payer's telecommunication sub
account, the communicating steps include sending encrypted text receipts to
5 payer's mobile devices and payee's server over the network as confirmation.

16. A method according to claim 1 wherein said communicating data indicative
of the transaction from the point-of-sale to the centralized payment processor:
10 communicating a transaction message indicating the amount of the payment, the
identity of the telecommunication payer account holder, the identity of the
payee from the point-of-sale to the payment processor;

15 17. A method according to claim 1 wherein said communicating data indicative
of the payment from the payer to the centralized payment processor and
telecommunication service provider main processor:

in response, communicating an activation code to the payment processor from
20 the payer's mobile device;

in response, communicating a request for authentication code from the payment
processor upon approving the activation code;

in response, communicating an authentication code to the payment processor
from the payer's mobile device;

- 5 communicating a request to verify the authentication code to the payer's
telecommunication service provider's main processor;

receiving a response from the payer's telecommunication service provider main
processor;

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communicating the credit instruction to payee's telecommunication service
provider's main processor;

communicating the debit instruction to payer's telecommunication service

- 15 provider's main processor;

communicating a text message receipt to payee's server;

communicating a text message receipt to payer's mobile device;

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providing a network access point for the payment processor; and

routing the transaction message via the network access point to the payment processor.

18. A method according to claim 1 and further comprising settling the payment transaction by receiving confirmation of debiting an amount of money equal to the payment amount in payer's sub account, subject to adjustment, from the payer's telecommunication service provider and a confirmation of crediting the said amount subject to adjustment, into the payee's telecommunication account by book entry from payee's telecommunication service provider.

19. A method according to claim 1 including, in the payment processor, maintaining a database of payers' telecommunication accounts and a list telecommunication accounts of participating payees linked to each transaction unique identifier for the purposes of reconciliation and profiling of users.

20. A method according to claim 1 and further comprising a customer interface comprising an interactive voice response module.